



Universal Design For Learning

Acknowledgement: Joy Smiley Zabala, Ed.D., ATP

CAST and the National Center on Accessible
Instructional Materials

Adapted for Sydney Region Learning and Support Teachers

GOALS FOR THIS SESSION

- Understand the concepts of Universal Design for Learning
- Apply the concepts of Universal Design for Learning to classroom practice



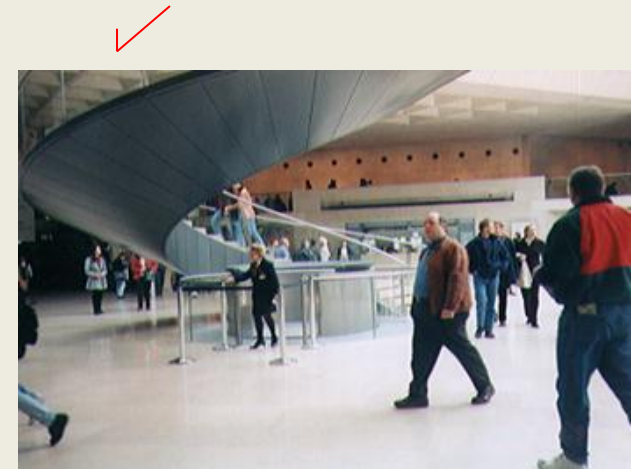
Transforming education through Universal Design for Learning — <http://www.cast.org>

UDL at a glance

<http://www.youtube.com/watch?v=bDvKnY0g6e4>

UNIVERSAL DESIGN FOR LEARNING

- is a set of principles for curriculum development that give all individuals equal opportunities to learn.
- provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone
- supports the design of a flexible, responsive curriculum that provides opportunities for the participation and achievement of all students
- has roots in technology, disability, architecture, and neuroscience



UDL

Reduces barriers in instruction

Removes barriers to equal access and helps to provide a “least restrictive environment” for students with disabilities

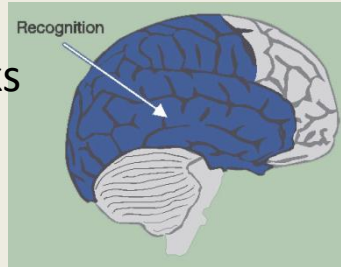
Provides appropriate accommodations, supports, and challenges

Does not remove academic challenges or water down the curriculum.

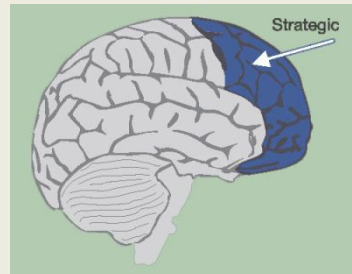
Maintains high achievement expectations for all students

Network

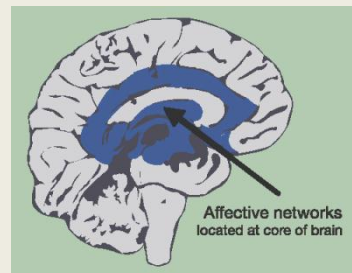
Recognition Networks
the 'what'
of learning



Strategic Networks
The 'how'
of learning



Affective Networks
the 'why'
of learning



3 Principles of UDL

Supporting the networks

1. **Multiple Means of Representation** gives learners various ways of acquiring information and knowledge
2. **Multiple Means of Action and Expression** provides learners alternatives for demonstrating what they know
3. **Multiple Means of Engagement** taps into learners interests, offers appropriate challenges and increases motivation

UDL AND THE LEARNING BRAIN



PREPARING AN INDIAN MEAL

Thinking about the three brain networks

1. Identify your own strengths and challenges in regard to preparing an Indian meal.

Strengths/Interests	Challenges/Barriers
Recognition networks enable us to identify and understand information, ideas, and concepts.	
Strategic networks enable us to plan, execute, and monitor actions and skills.	
Affective networks enable us to engage with tasks and learning and with the world around us.	



2. In pairs:

- a) Discuss ways you learn best
- b) Identify supports and scaffolds to assist your partner to prepare an Indian meal

PRINCIPLES OF UDL

Multiple means of representation for students to access meaning

- Visual presentations i.e. Discovery
- Education Streaming videos, teacher created visuals
- Enlarged print, use of color , & design
- Readability tool
- Audio text support
- WebAnywhere, WYNN, Co:Writer, Clicker 5
- Multimedia presentations - PhotoStory 3,
- Powerpoint, SMART Notebook
- Internet links to background information



PRINCIPLES OF UDL

Multiple means of expression for students to demonstrate learning

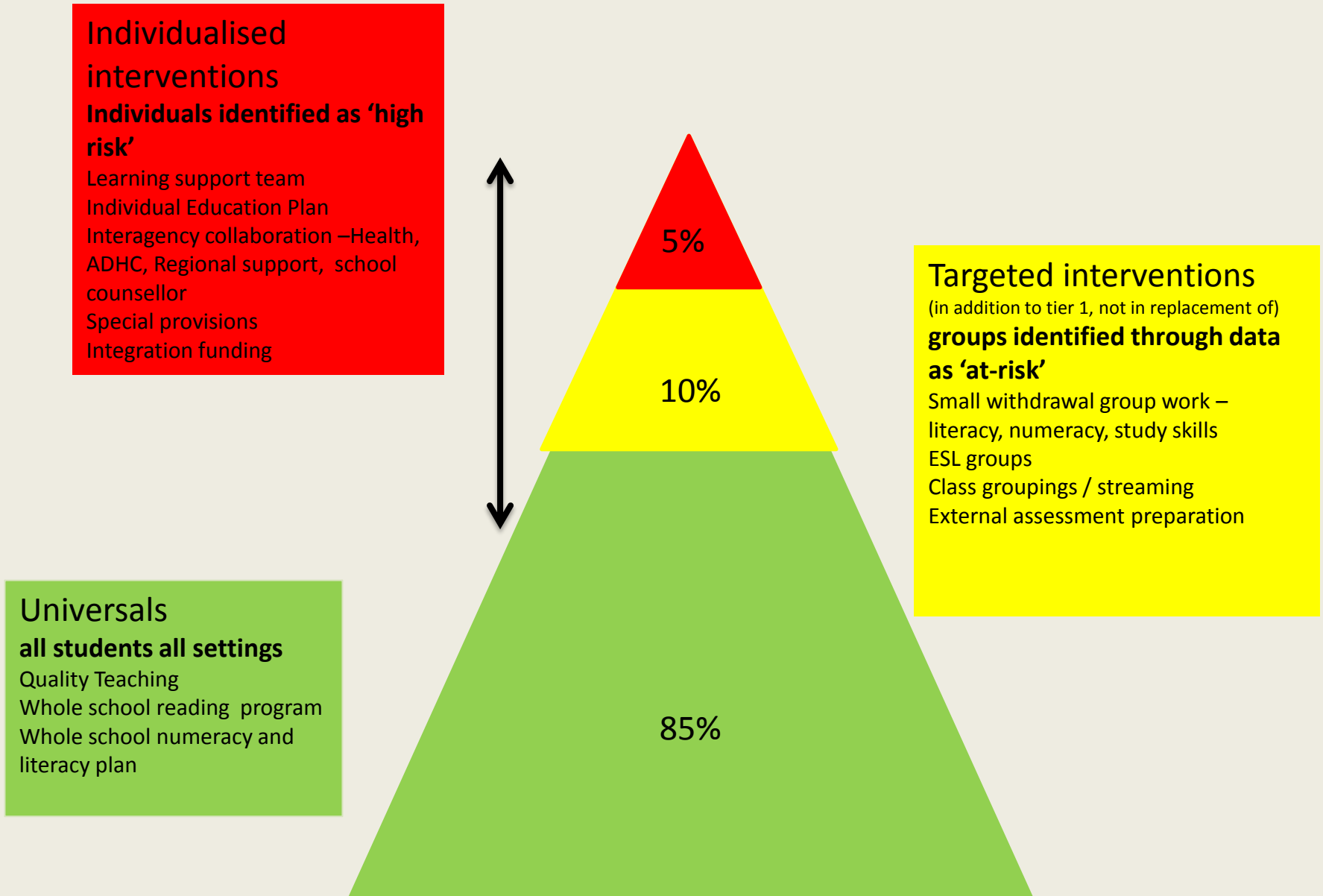
- Graphic tools Inspiration, Kidspiration,
- Word tools
- Keyboarding with spelling supports
- Writer, MS Word spellcheck, WYNN, word banks
- Narration, audio recording, podcasts
- Multimedia tools- i.e. PowerPoint, Photostory 3,
- Clicker 5, Inspiration, SMART Notebook
- 3-D models
- Artistic displays, drawings, collages,
- paintings
- Data displays- graphs and charts

PRINCIPALS OF UDL

Multiple means of engagement

- Infused throughout your classroom
- Student choices
- Audio/visual/hands on
- SMART responses
- Multimedia
- Project-based inquiry
- E-mail, blogging, wikis
- Collaborative learning

Learning support continuum



Behaviour Support Continuum

Individualised interventions

Individuals identified as 'high risk'

Learning Support Team
Behaviour Plan
Risk Management Plan
Individual Education Plan
Health care plan
Interagency collaboration – FACS, Health, ADHC, Regional support, school counsellor
Special provisions
Integration funding



5%

10%

85%

Targeted interventions

(in addition to tier 1, not in replacement of)

groups or settings identified through data as 'at-risk'

Small group work – welfare team / counsellor / community organisations
Welfare programs – breakfast / check in – check out / attendance programs
Focus on transitions / assembly etc

Universals

all students all settings

Whole school welfare and discipline policy
Reinforcement of positive behaviour
Quality Teaching
Effective classroom management
Positive environment

UDL CURRICULUM PILLARS



Classroom elements

1. CONTENT

what the student needs to learn and avenues for accessing that information

2. PROCESS

student engagement activities to make sense of and master content, and alternative ways of exploring content

3. PRODUCT

evidence of student application and extension in culminating tasks – usually the outcome of a lesson or unit of work

4. ENVIRONMENT

the physical space of the classroom - how it looks; how it is structured

&

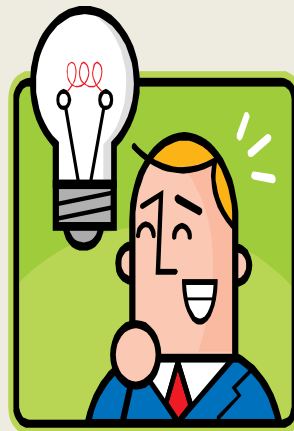
the social and emotional feel of the classroom

TIER 1 - ACTIVITY

THINK ABOUT THE WIDE RANGE OF VULNERABLE LEARNERS IN OUR CLASSROOMS and UDL PRINCIPLE 1
MULTIPLE MEANS OF REPRESENTATION

1. **(10 min)** With a partner, list the UDL strategies you see currently operating at your school/s that support a range of academic and behavioural needs
2. **(10 min)** Join another pair, discuss and categorise the UDL strategies into the relevant areas. Think about school wide systems.
3. **(15min)** Feedback and discussion re school wide systems

These will be collated and typed for distribution



- What are AIM?
- Why provide AIM?
- How are Decisions Made?

Accessible Instructional Materials(AIM): Simply Said



This video explains Accessible Instructional Materials in easy to understand language.

What are AIM?

Accessible instructional materials, or AIM, are materials that are designed or converted in a way that makes them usable across the widest range of student variability regardless of format (print, digital, graphical, audio, video). IDEA (Individuals with Disabilities Education Act) specifically focuses on accessible formats of print instructional materials. In relation to IDEA, the term AIM refers to print instructional materials that have been transformed into the specialized formats of braille, large print, audio, or digital text.

Braille

Large Print

Audio

Digital Text

CAN WE THINK IN A DIFFERENT WAY ABOUT CLASS PARTICIPATION?

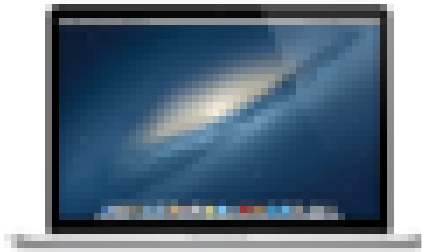
Move from...

To...

- READ
- LISTEN
- WRITE
- SPEAK
- MANIPULATE CALCULATIONS
- REMEMBER CONCEPTS
- REMEMBER PROCEDURES
- SOLVE PROBLEMS

- Take in information
- Express information
- Demonstrate understanding of processes
- Demonstrate understanding of concepts & ideas
- Show what they know through personally accessible formats

A TRANSFORMATIVE TOOL



MacBook Pro

ASSISTIVE TECHNOLOGY (AT) AND SUPPORTS

Application of a range of tools, electronic and other, to provide access to otherwise inaccessible learning tasks or environments.

CONNECTING UDL AND AT

- Assistive Technology looks at specific barriers a student may face in whatever environment they may be in
- Universal Design looks to make the learning environment as flexible and accommodating as possible
- Both approaches strive to ensure the access, participation and progress of students

MULTIPLE MEDIA & FORMATS

Provide a range of formats and media to ensure access for all



Emphasis on Flexible,
Transformable Digital
Media BUT... digital media
does not equal UDL
and digital does not
necessarily equal
accessible!



☆ home <http://udltechtoolkit.wikispaces.com/>

Edit 23 0 46 ...

Glogster **EDU**

Graphic Organizers

About UDL

Literacy Tools



Study Skills Tools

Research Tools

Writing Tools

Media & Digital Storytelling Tools

AudioBooks

Text-to-speech
Speech-to-text

Collaborative Tools



Math Tools

Free
Technology
Toolkit for
UDL in All
Classrooms

Additional Free Tools

Additional Strategies



Useful Links

MATHS K-6 SUPPORT DOCUMENT FOR STUDENTS WITH SPECIAL NEEDS

<http://k6.boardofstudies.nsw.edu.au/go/mathematics/support-students-special-needs>

Links access
related information

Questions guide you
through pages

New South Wales Government

K-6 Educational Resources
Board of Studies NSW

ask government | Board of Studies home | news

contact us | search

Go

Home

NSW Primary Curriculum Foundation Statements

English

Mathematics

Mathematics K-6 Support Document for Students with Special Education Needs

Introduction

Assessment

What evidence of learning is required?

How will this evidence be gathered?

Is there sufficient evidence that students have made progress as a result of these

Home > Mathematics > Mathematics K-6 Support Document for Students with Special Education Needs > Assessment

Criteria for assessment

Judgements about students' knowledge, skills and understanding in relation to the selected syllabus outcomes are made using criteria for assessment. The indicators in the syllabus can assist teachers in planning criteria for assessment. Teachers may wish to develop their own indicators, or modify syllabus indicators.

For some students, the teacher might plan criteria to indicate that the student has achieved the exit goal for a particular phase of learning and is ready to progress to the next phase of learning. These criteria will indicate the level of performance that the student will be able to achieve at the end of the phase of learning.

Examples

The criteria indicating that the student has achieved the exit goal for the acquisition phase, and is ready to progress to the fluency phase, would specify:

- the level of accuracy (eg 100 percent accuracy), and/or
- the frequency of occurrence of a response (eg correct for three consecutive repetitions).

The criteria indicating that the student has achieved the exit goal for the fluency phase of learning and is ready to progress to the maintenance and generalisation phases, would specify:

What criteria can I use to make decisions about students' learning?

Assessment

Access pages from
drop down menu

Icons lead to photos,
videos, references

Pages colour coded
to match headings

STEPPING UP THE UDL STAIRS

Provide Access *by planning and leading and teaching in ways that eliminates barriers to learning*

Increase Participation *by providing options that increase recognition, expression &, engagement*

Demonstrate achievement *by monitoring progress and documenting change in professional practices and student achievement*



UDL RESOURCE COLLECTIONS

The National Center on UDL

<http://www.udlcenter.org>

The UDL Implementation and Research Network

<http://udl-irn.org>

The National UDL Task Force

<http://www.advocacyinstitute.org/UDL/> legislative.shtml

CAST

<http://www.cast.org>

<http://udltechtoolkit.wikispaces.com/>

Mathematics K-6 Support Document for Students with Special Education Needs

<http://k6.boardofstudies.nsw.edu.au/go/mathematics/support-students-special-needs>